

Abstract of the Disclosure

An input signal line is split and guided to a 2 x 1 switch and a drop unit by an optical coupler. The 2 x 1 switch guides the signal from the optical coupler or a signal from a second 2 x 2 switch to a first 2 x 2 switch. The first 2 x 2 switch guides the signal from the 2 x 1 switch or a signal from an add unit to an inter-station line or the second 2 x 2 switch. The second 2 x 2 switch guides the signal to a 2 x 1 switch for an inter-station line to which the signal is output. The add unit guides a signal to a first 2 x 2 switch for an inter-station line to which the signal is added. The drop unit guides a signal from a desired inter-station line to an intra-station line.